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United States Department of the Interior

FISH AND WILDLIFE SERVICE  
DENVER WILDLIFE RESEARCH CENTER  
BUILDING 16, DENVER FEDERAL CENTER  
DENVER, COLORADO 80225

October 17, 1980

Mr. Dale Kaukeinen  
ICI United States, Inc.  
Biological Res. Ctr.  
P.O. Box 208  
Goldsboro, North Carolina 27530

Dear Dale:

Attached is a report on the status of the Barnowl-Talon baiting study  
as per your request.

Sincerely,

*Paul Hegdal /ch*

Paul Hegdal  
Wildlife Biologist

Attachment



*Save Energy and You Serve America!*

## Radio Telemetry Studies of Nesting Barn Owls

Paul L. Hegdal and Raymond W. Blaskiewicz, U.S. Fish and Wildlife Service, Denver Wildlife Research Center, Building 16, Denver Federal Center, Denver, Colorado 80225

During spring and summer 1980, in order to evaluate secondary hazards of Talon, we located 35 active barn owl (Tyto alba) nests in about 1100 sq. km. (430 sq. mi.) in southwestern New Jersey. Radio transmitters were attached by tail clips to 27 adult nesting barn owls and 8 fledged young of the year starting on June 9. Movements of radio-equipped birds were monitored during feeding periods and daytime roosts were located. Some birds regularly roosted 4-5 km. (2.5-3 mi.) from the nest site. Maximum distance from nests to roost was 8 km. (5 mi). Some birds regularly hunted over 3 km. (2 mi.) from the nest site and not necessarily in the vicinity of the roost site. Maximum distance from nest to hunting areas was about 5.6 km. (3.5 mi.). In one 20 sq. km. (about 8 sq. mi.) area, that was most intensively searched, we located 12 active barn owl nests. Known nest density in this area was one nest per 1.6 sq. km. (1 nest per 0.6 sq. mi.). For the entire study area we found 63% of active nests in trees, 11% in barns, 8.5% in silos, 8.5% in chimneys, and 8.5% in miscellaneous locations. We put up 50 nest boxes starting in early June after most nesting was well underway, but still had barn owls attempting to nest in 3 boxes in 1980. Baiting farmsteads with Talon started on July 25. To date we have no supported barnowl mortality caused by Talon. Pellets have been collected from nests on treated farmsteads but have not been completely analyzed. Most prey items appear to be meadow voles (Microtus spp). While some Norway rats (Rattus norvegicus) and house mice (Mus musculus) do occur in some of the old pellet collections, they do not make up a large part of the diet of owls in the study area.